

Title (en)

Area ruled fan blade ends for turbofan jet engine.

Title (de)

Bläuserschaufelende basierend auf regelbarem Querschnitt für ein Turbotriebwerk.

Title (fr)

Extrémités d'aubes de turbosoufflante, à section réglée.

Publication

EP 0622526 A1 19941102 (EN)

Application

EP 94300924 A 19940208

Priority

US 5520393 A 19930430

Abstract (en)

An annular casing (12) axially conducts fluid through, defining a central longitudinal axis (A). A hub (26) is rotatably supported about the axis within the casing. Rotor blades (50) are spaced about and radiate from the hub, each of the rotor blades including a part-span damper (56) circumferentially interconnecting the next adjacent rotor blade. An area rule (58) is formed in one of the hub (26) and casing (12) for reducing drag between the casing and hub caused by the part-span dampers (56) at transonic speed. The area rule comprises an annularly troughed contour (60). The troughed contour is radially aligned with the part-span dampers.

IPC 1-7

F01D 5/14; **F01D 5/24**; **F02C 7/04**

IPC 8 full level

F01D 5/14 (2006.01); **F01D 5/20** (2006.01); **F01D 5/22** (2006.01); **F01D 11/12** (2006.01)

CPC (source: EP US)

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Citation (search report)

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